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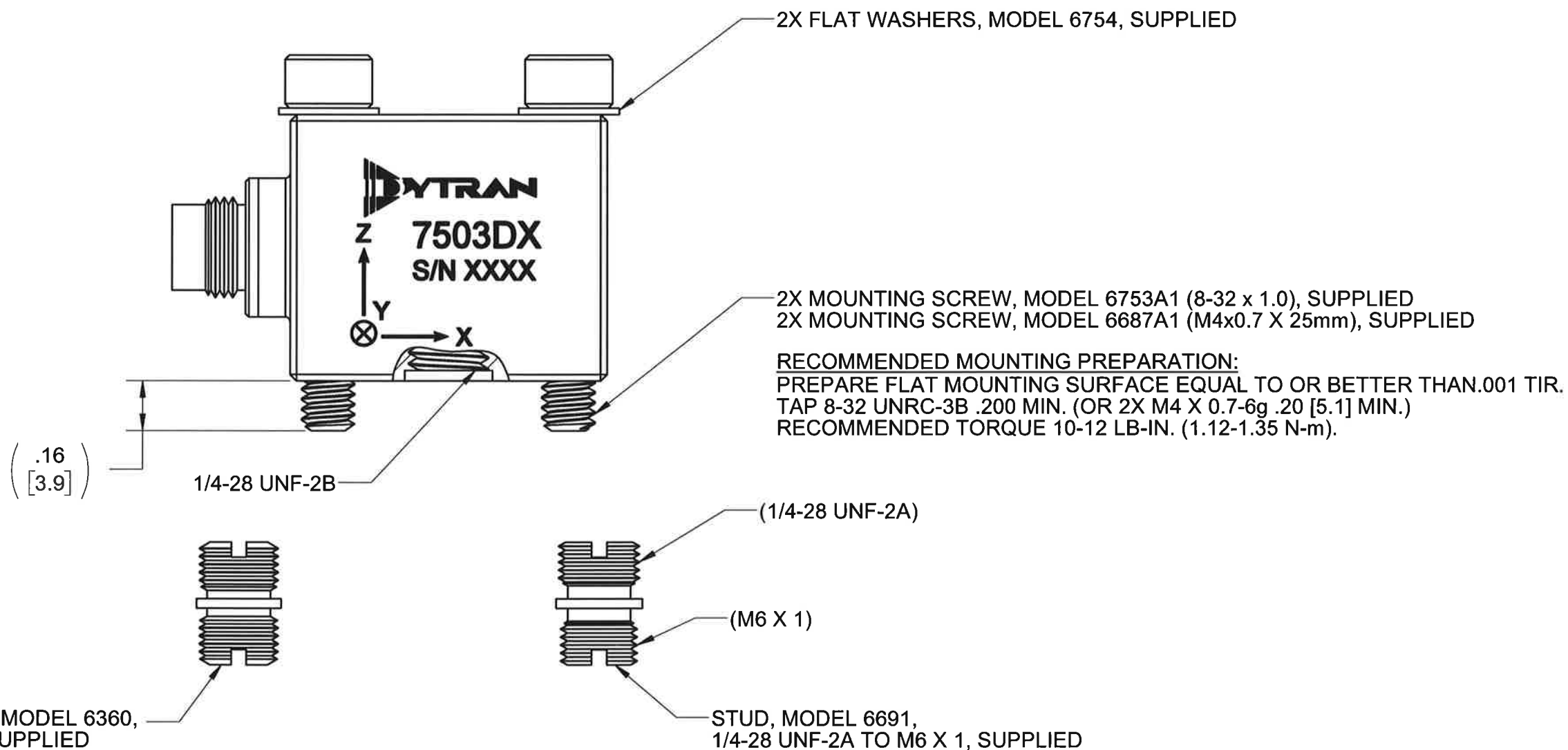
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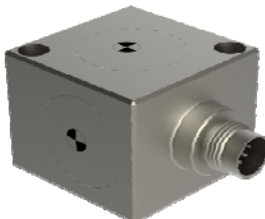
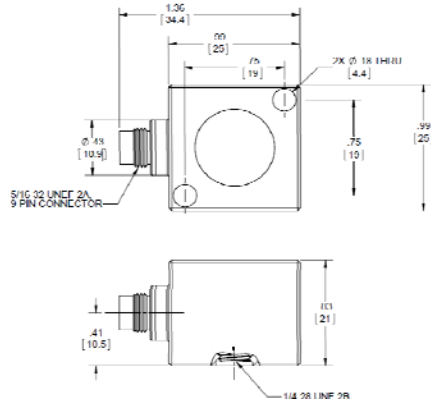
A




RECOMMENDED MOUNTING PREPARATION: MODEL 6366
PREPARE MOUNTING SURFACE, $\phi 1.25$ [31.2] MIN, FLAT TO .001 TIR.
TAP 1/4-28 UNF-2B ∇ .200 [5.1] MIN. TORQUE TO 12-15 Lb-in.

RECOMMENDED MOUNTING PREPARATION: MODEL 6691
PREPARE MOUNTING SURFACE, $\phi 1.25$ [31.2] MIN, FLAT TO .001 TIR.
TAP M6 X 1 ∇ .200 [5.1] MIN. TORQUE TO 12-15 Lb-in.

		MASTER ONLY IF IN RED	
TITLE: OUTLINE/INSTALLATION DWG, TRIAxIAL DC ACCELEROMETER, 7503D SERIES			
SIZE B	CAGE CODE 2W033	DWG NO 127-7503D	REV D
SCALE: 2:1		SHEET 2 OF 2	

Model Number 7503D4		PERFORMANCE SPECIFICATION				DOC NO PS7503D4	
		TRIAXIAL VARIABLE CAPACITANCE ACCELEROMETER				REV J, ECN 15137, 06/13/19	
		<ul style="list-style-type: none">• VARIABLE CAPACITANCE TECHNOLOGY• ± 4V DIFFERENTIAL OUTPUT• HERMETICALLY SEALED• DC RESPONSE					
		ENGLISH		SI			
		1.3		oz	38		grams
		9-pin, 5/16-32 UNEF-2A			9-pin, 5/16-32 UNEF-2A		
		Titanium Alloy			Titanium Alloy		
		MEMS			MEMS		
		PHYSICAL		Type			
		Weight, Max					
		Connector					
		Material					
Sensing Technology							
PERFORMANCE							
Input Range		±25		g	±245.3		m/s ²
Frequency Response (±5%)		0 - 500		Hz	0 - 500		Hz
Frequency Response (±3dB)		0 - 1500		Hz	0 - 1500		Hz
Resonant Frequency		>3000		Hz	>3000		Hz
Sensitivity Differential, ±5% [1]		160		mV/g	16		mV/m/s ²
Output Noise, Differential, Typ		44		μ g rms/√ Hz	432		μ m/s ² /√ Hz
Non-Linearity, Max [2]		0.5		% F.S	0.5		% F.S
Cross Axis Sensitivity, Max		3		%	3		%
Scale Factor Calibration Error, Max.		1		%	1		%
Zero Measured Output		±50		mV	±50		mV
ENVIRONMENTAL							
Maximum Mechanical Shock (0.1 ms)		±2000		gpk	±19620		m/s ² peak
Bias Temperature Shift, Max [3]		111		(ppm of span)/°F	200		(ppm of span)/°C
Bias Calibration Error, Max		0.5		% of span	0.5		% of span
Operating Temperature Range [4]		-67 to +257		°F	-55 to +125		°C
Scale Factor Temperature Shift [3]		-111 to +111		ppm/°F	-200 to +200		ppm/°C
Seal		Hermetic			Hermetic		
ELECTRICAL							
Output Common Mode Voltage, Typ		2.5		VDC	2.5		VDC
Output Impedance		<10K		Ω	<10K		Ω
Operating Voltage		+6 to +33		VDC	+6 to +33		VDC
Operating Current (AOP & AON open), Max		35		mA Dc	35		mA Dc
Power Supply Rejection Ratio		>65		dB	>65		dB
Ground Isolation		>30		MΩ	>30		MΩ
This family also includes:							
Model	Input Range (g)	Frequency Response, ±3dB (Hz)	Sensitivity Differential, ±5% (mV/g)	Max Shock (0.1ms) g (peak)	Noise Differential (μg/√Hz)		
7503D1	±2	0-400	2,000	2000	10.5		
7503D2	±5	0-800	800	2000	12		
7503D3	±10	0-1000	400	2000	18		
7503D5	±50	0-2700	80	2000	69		
7503D6	±100	0-2500	40	2000	122		
7503D7	±200	0-5000	20	2000	290		
7503D8	±400	0-4000	10	2000	400		
7503D9	±5(X&Y), ±25(Z)	0-800(X&Y), 0-1500(Z)	800(X&Y), 160(Z)	2000	12(X&Y), 44(Z)		
7503D10	±5(X&Y), ±50(Z)	0-800(X&Y), 0-2700(Z)	800(X&Y), 80(Z)	2000	12(X&Y), 69(Z)		
Refer to the performance specifications of the products in this family for detailed description.							
Supplied Accessories:							
1) Accredited calibration certificate (ISO 17025)							
2) Mounting stud, Model 6360, 1/4-28 UNF-2A, Qty 1							
3) Mounting stud, Model 6691, 1/4-28 UNF-2A to M6 X 1, Qty 1							
4) Mounting screws, Model 6753A1, 8-32 x 1.0, Qty. 2							
5) Mounting screws, Model 6687A1, M4x0.7 x 25mm, Qty. 2							
6) Flat washers, Model 6754, Qty. 2							
Notes:							
[1] Single ended sensitivity is half of values shown. (Ref. at 100 Hz)							
[2] -90% to +90% of Full Scale.							
[3] Over the rated temperature range.							
[4] Limit operating voltage to +24VDC when temperature is greater than 240°F (115°C).							
[5] In the interest of constant product improvement, we reserve the right to change specifications without notice.							
It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary overtime. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts.							
							
Units on the line drawing are in inches. Refer to 127-7503D for more information.							



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This family also includes:

Model	Input Range (g)	Frequency Response, ±3dB (Hz)	Sensitivity Differential, ±5% (mV/g)	Max.Shock (0.1ms) g (peak)	Noise Differential (μg/√Hz)
7503D1	±2	0-400	2,000	2000	10.5
7503D2	±5	0-800	800	2000	12
7503D3	±10	0-1000	400	2000	18
7503D5	±50	0-2700	80	2000	69
7503D6	±100	0-2500	40	2000	122
7503D7	±200	0-5000	20	2000	290
7503D8	±400	0-4000	10	2000	400
7503D9	±5(X&Y), ±25(Z)	0-800(X&Y), 0-1500(Z)	800(X&Y), 160(Z)	2000	12(X&Y), 44(Z)
7503D10	±5(X&Y), ±50(Z)	0-800(X&Y), 0-2700(Z)	800(X&Y), 80(Z)	2000	12(X&Y), 69(Z)

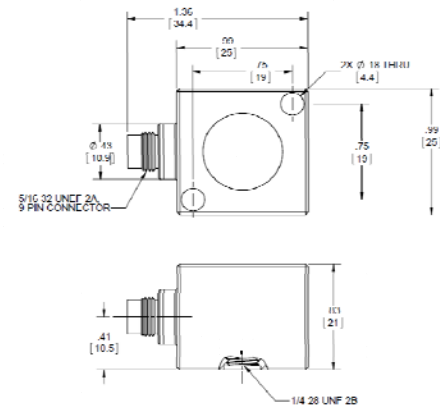
Refer to the performance specifications of the products in this family for detailed description.

Supplied Accessories:

- 1) Accredited calibration certificate (ISO 17025)
- 2) Mounting stud, Model 6360, 1/4-28 UNF-2A, Qty 1
- 3) Mounting stud, Model 6691, 1/4-28 UNF-2A to M6 X 1, Qty 1
- 4) Mounting screws, Model 6753A1, 8-32 x 1.0, Qty. 2
- 5) Mounting screws, Model 6687A1, M4x0.7 x 25mm, Qty. 2
- 6) Flat washers, Model 6754, Qty. 2

Notes:

- [1] Single ended sensitivity is half of values shown. (Ref. at 100 Hz)
 - [2] -90% to +90% of Full Scale.
 - [3] Over the rated temperature range.
 - [4] Limit operating voltage to +24VDC when temperature is greater than 240°F (115°C).
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